



# STUDENT REPORT

## DETAILS

Name

ZIHAN

Roll Number

3BR23EE113

## EXPERIMENT

Title

ENCODE THE NUMBER

Description

You work in the message encoding department of a national security agency. Every message that is sent from or received in your office is encoded. You have an integer N, and each digit of N is squared and the squares are concatenated together to encode the original number. Your task is to find and return an integer value representing the encoded value of the number.

**input1:** An integer value N representing the number to be encoded.

**Output :**

Return an integer value representing the encoded value of the number.

Sample Input:

167

Sample Output:

13649

**Source Code:**

```
def encode_number(N):  
    # Convert the number to a string to iterate through each digit  
    str_N = str(N)  
  
    # Initialize an empty string to store the encoded result  
    encoded_str = ""  
  
    # Iterate through each character in the string representation of N  
    for digit in str_N:  
        # Square the digit and concatenate to the result string  
        encoded_str += str(int(digit) ** 2)  
  
    # Convert the final encoded string to an integer and return  
    return int(encoded_str)  
  
# Sample Input  
N = 167  
# Sample Output  
result = encode_number(N)  
print(result) # This will output 13649
```

## RESULT

1 / 5 Test Cases Passed | 20 %